Vo

Work Order ID 61456

Wednesday, August 25, 2010 2:31:45 PM

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Page 1

Item ID: D206-642-441 Accept Setup Start **Revision ID:** Stop Replacement Skidtube Item Name: **Start Date:** Start Qty: 1.00 8/27/2010 **Cust Item ID:** Required Date: 9/9/2010 Req'd Qty: 1.00 **Customer:** Reference: Start Run Process Plan: M Date: [0-8-25 Tooling: Approvals: Date: Stop QC: Date: SPC (Y/N): Date: Sequence ID/ **Operation** Set Up/ Tool ID Tool # Plan Accept Reject Reject Insp. **Work Center ID** Description **Run Hours** Code Qty Qty Number Stamp **Draw Nbr Revision Nbr** D2650 Rev F 100 0.00

DOCUMENT CONTROL

Memo

Document Control

Photocopy bluefile and create labels per PPP D206-642-441

0.00

CHG002

N/A H

W/O:			W	ORK ORDER CHANGI	ES						
DATE	STEP	PRO	OCEDURE CH	ANGE	Ву	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector		
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Part No	:	PAR #:	Fault Cat	tegory:	NCR: Yes	No DQ	A:	Date:			
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NCR:			WORK ORI	DER NON-CONFORMA	NCE (NC	R)					
DATE	STEP	Description of NC Section A	Initial Chief Eng	Corrective Action Section Action Description Chief Eng	on B Sign Date	& Sect	cation ion C	Approval Chief Eng	Approval QC Inspector		
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Page 2

Reject

Number

Insp.

Stamp

Wednesday, August 25, 2010 2:31:45 PM Item ID: D206-642-441 Accept Setup Start **Revision ID:** Stop Item Name: Replacement Skidtube **Start Date:** 8/27/2010 Start Qty: 1.00 **Cust Item ID:** Required Date: 9/9/2010 **Req'd Qty:** 1.00 **Customer:** Reference: Run Start Process Plan: Date:_____ **Approvals:** Tooling: Date: Stop Date: _____ SPC (Y/N): Date: Sequence ID/ Operation Set Up/ **Tool ID** Tool # Plan Accept Reject Work Center ID Description **Run Hours** Code Qty Qty 110 0.00 Skidtubes Skidtubes 0.00 Memo Skidtubes 1-Deburr Fwd edge of tube 2-Remove ridge on inside of Fwd edge of tubeas per Dwg D2650 BE 10/08/26 3-Weld Fwd Cap as per Dwg D2650. Use aluminum rod. Grind D2647 to fit as A/R□□Aluminum Rod□ 4-Grind weld flush to cap on top surface only. 5-Cut aft end 138.60" from front of tube 6-Drill pilot holes using drill jig DT8025 & DT8169 (A,B,C,D). Open to Ø0.312".

BE10/08/30

10-Remove inner indexing ridge on aft end of skidtubeas per Dwg D2650

9-Open holes for Tow Ring to Ø0.625" as per Dwg D2650, D2650-7 Drilling

7-Drill holes for wearplates using DT 8028-7. Open to Ø 0.297".

11-Deburr and Blow out all chips form inside the tube

8-Open using #6 Drill Bit

Detail

W/O:			WORK ORDER CHANGES							
DATE	STEP	PR	Ву	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector			
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Part No	:	PAR #:	Fault Category:	NCR: Ye	es No DQ	A:	Date: _			
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Work Order ID 61456

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Item ID:

D206-642-441

Accept

Setup Start



Revision ID:

Item Name: Replacement Skidtube

Start Date:

8/27/2010 Required Date: 9/9/2010

Start Qty: 1.00 Req'd Qty: 1.00

Cust Item ID: Customer:

Reference:

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Process Plan: _____ Date:

Tooling:

Date:

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Stop



Date: _____

SPC (Y/N):

Date:

Stop



Sequence ID/ Work Center ID

115

OC

Quality Control

Operation **Description**

QC: _____

QC5- Inspect part completeness to step on W/O

Set Up/ **Run Hours**

Tool ID

Tool # Plan Code

Accept Qty

Reject Reject Number

Insp. Stamp

Memo

Memo

0.00 8 10/05/30

116

OC

Quality Control

QC10- Inspect visual per QSI004- ground welds

0.00

120

HandFinish Hand Finishing Chemical Conversion Coat per QSI005 4.1

0.00

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Memo

0.00

W/O:			WO	RK ORDER CHANG	ES	***			
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Work Order ID 61456

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Page 4

Item ID:

D206-642-441

Accept



Setup Start



Revision ID:

Item Name:

Replacement Skidtube

Start Date:

Required Date: 9/9/2010

8/27/2010

Start Qty: 1.00

Req'd Qty: 1.00



Date:

Cust Item ID:

Customer:

Reference:

Approvals:

QC:

Process Plan:

Operation

Description

Date:

Tooling:

SPC (Y/N):

Set Up/

Run Hours

Date: _

Date:

Run

Start

Stop



Stop

Sequence ID/ **Work Center ID**

130

Memo

QC3- Inspect Part Finish

0.00

Tool ID

Tool # Plan

Accept Qty Code

Reject Qty

Reject Number Stamp

Insp.

Quality Control

0.00

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Work	Order	H)	614	56

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Item ID:

D206-642-441

Accept



Setup Start



Revision ID:

Item Name:

Replacement Skidtube

Start Date:

8/27/2010

Start Qty: 1.00

Required Date: 9/9/2010 Req'd Qty: 1.00



Cust Item ID: Customer:

Date:

Tool # Plan

Code

Reference:

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Process Plan:

Date:_____

Date: **Tooling:**

SPC (Y/N):

Set Up/

Run Hours

Date:

Tool ID

Start Run

Reject

Qty

Reject

Stop

Stop

Number Stamp

Sequence ID/ Work Center ID

Operation Description

140

Skidtubes Skidtubes

Skidtubes

Memo

0.00

0.00

1-Open holes to finished size as per Dwg D2650, D2650-7 Drilling Detail (without cutting fluid)

2-Countersink crossbolt spacer holes as per Dwg D2650(without cutting fluid)

3-Deburr. Blow out chips. Grind alodine off around crossbolt spacer.

4-Bond D2654-7 web in place as per QSI 015Ensure holes line upAllow 12 Hrs. cure time before cutting

Finish Date: 10/8/31 🗆 Time: 19:60 ~ M

A/R□Sikaflex-291□ m/ 4 Sikaflex expiry date:

Accept

Qty

Insp.

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W/O:			W	ORK ORDER CHANGE	S				
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Work Order ID 61456

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Item ID:

D206-642-441

Accept

Setup Start

Stop



Revision ID:

Item Name:

Replacement Skidtube

Start Date:

8/27/2010

Start Qty: 1.00

Required Date: 9/9/2010 Req'd Oty: 1.00

Date: _____

Cust Item ID:

Customer:

Tool ID

Reference:

Approvals:

Process Plan: OC:

Date: _____

Tooling: SPC (Y/N):

Date:

Date:

Tool # Plan

Code

Start

Reject

Qty

Stop



Insp.

Stamp

Sequence ID/ Work Center ID

150

QC

Quality Control

Operation Description

QC5- Inspect part completeness to step on W/O

Set Up/ **Run Hours**

Qty

Accept

Reject

Number

Run

Skidtubes Skidtubes

160

Skidtubes

Memo

Memo

0.00

0.00

0.00

1-Prep per QSI 005 and Insert cross bolt spacers D2649. Weld as per QSI 004 and Dwg D2650. Remember to back drill each hole to 0.25" before welding the

other side. Use aluminum rod. A/R Aluminum Rod M/1250

2-Grind welds flush as per Dwg D2650.

3-Counterbore 5/16" x 0.750" deep as per Dwg D2650 Deburr

W/O:			WORK ORDER CHANGES							
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Item ID: Revision ID:	D206-642-4			Accept					Setup S	Start Stop		
Item Name: Replacement Skidtube Start Date: 8/27/2010 Start Qty: 1.00 Required Date: 9/9/2010 Req'd Qty: 1.00 Reference:		1 14 14 14 14 14 14 14 14 14 14 14 14 14		Cust Item ID: Customer:				·	Stop			
Approvals:	Process Pla	an:	Date:	Tooling:	Da	ite:				Start		
	QC:					ite:			:	Stop		
Sequence ID/ Work Center 170 Skidtubes Skidtubes		Operation Description HandFinishing Memo Install D268	0-041 Nut Plate as per Dw	Set Up/ Run Hours 0.00 0.00 g D2650	Tool ID	Tool #	Plan Code	Accep Qty	ot Rejec Qty		Reject Jumber	Insp. Stamp
180 		QC10- Inspect visual pe	QSI004- ground welds	0.00 Z co lo	30/2			, ; ⁻				

Quality Control

Quality Control

QC5- Inspect part completeness to step on W/O

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W/O:			WORK ORDER CHANGES											
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Item ID:

D206-642-441

Accept



Date:

Setup Start

Stop



Revision ID:

Item Name:

Replacement Skidtube

Start Date:

8/27/2010

Start Qty: 1.00

Required Date: 9/9/2010

Req'd Qty: 1.00



Cust Item ID:

Customer:

Reference:

Approvals:

Process Plan:

Date:

Date:

Tooling:

SPC (Y/N):

Date:

Tool # Plan

Stop

Reject

Qty

Run

Accept

Qty



Sequence ID/ Work Center ID

200

HandFinish Hand Finishing

Operation Description

Pressure Wash per QSI005 4.3

Set Up/ Run Hours.

Tool ID

Code

Number

Reject

Insp. Stamp

Brush alodine tube on crossbolt spacer area, do not acid etch, do not dip tube in

205

SprayPaint **Spray Painting** Spray Painting per QSI005 4.2

0.00

0.00

0.00

Memo

Spray paint Delfleet Blue Primer B 114424 Deflect Blue [1317] Clear Delfleet B 115506

206

QC14- Inspect Spray Paint

0.00

Quality Control

Memo

0.00

25 10-09-24

W/O:			W	ORK ORDER CHANGI	ES							
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Work Order ID 61456

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Item ID:

D206-642-441

Accept



Setup Start

Stop



Revision ID:

Item Name: Replacement Skidtube

Start Date:

8/27/2010

Start Qty: 1.00

Required Date: 9/9/2010

Req'd Qty: 1.00



Cust Item ID: Customer:

Tool ID

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QC:

Process Plan:

Operation

Description

Date: Date:

Tooling:

0.00

0.00

SPC (Y/N):

Date: Date:

Code

Tool # Plan

Start



Sequence ID/ **Work Center ID**

230

HandFinish Hand Finishing

HandFinishing

Set Up/ **Run Hours**

10/04/ 27

Qty

Accept

Number Stamp

'1-Install inserts & wearpads as per dwg D2922. Use a drop of Sikaflex inside insert holes before installing wearpad/wearplate.

A/R Sikaflex-291 MI 409	j
Sikaflex expiry date:□ 10110	

2-Install O-Rings D2651-3 on plugs D2651-1 with Petroleum Jelly and install -plugs as per Dwg D2650. Clean excess adhesive

- 3-Install MS27039-4-06 Screw as per DEO 9153
- 4-Inspect for foreign object per QSI 024
- 5-Install D2646 Aft Cap and seal with SikaflexClean excess adhesive A/R \Bigcup Sikaflex-291 \Bigcup \lambda \lambda \lambda \lambda \lambda \lambda \Bigcup \ Sikaflex expiry date: 1 h / t O

Stop

Reject

Qty

Run

Reject

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W/O:			WC	ORK ORDER CHANGE	ES		JW		
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Work Order ID 61456

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Item ID:

D206-642-441

Accept



Setup Start



Revision ID:

Item Name:

Replacement Skidtube

Start Date:

8/27/2010

Start Qty: 1.00

Required Date: 9/9/2010

Req'd Qty: 1.00



Cust Item ID:

Customer:

Tool ID

Reference:

Approvals:

QC:

Process Plan:

Date:

Date: Tooling:

SPC (Y/N):

Date:

Run

Start

Stop

Stop



Sequence ID/

Work Center ID

240

Quality Control

Operation Description

QC5- Inspect part completeness to step on W/O

Set Up/ **Run Hours**

Tool # Plan Qty Code

Accept Reject **Qty**

Reject Number

Insp. Stamp

Date:

250

Packaging

Packaging

Packaging

Memo

Memo

Identify and pack for shipping as per PPP D206-64

Location:

PPP Rev:_

0.00

P6510)

260

Quality Control

QC21- Final Inspection - Work Order Release

0.00

Memo

0.00

10109/2845f

		WO	RK ORDER CHANC	GES		•		
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Pieklist Print

Wednesday, August 25, 2010 2:31:44 PM

Work Order ID: 61456

Parent Item:

D206-642-441

Parent Item Name: Replacement Skidtube



Start Date: 8/27/2010

Required Date: 9/9/2010

Page 1

Start Qty: 1.00

Required Qty: 1.00

Comments:

IPP Rev·H□05.10.11□Added D3429-1 per CHG002 □KJ/CP/JLM

IPP Rev:I 08-05-01 add QC3 DD verified by:EC IPP Rev:J 08-09-29 revF as per dwg DD verified by:

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
D2620 Skidtube, 206 Skidtube		Manufactured	No			110	Each	4.0000	1	1			
				<u>Locatio</u>	<u>n</u>	Loc	<u>Otv</u>	Loc Code					
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D2646		Manufactured	No		37342	110	4 Each	72.0000	1	/		M	19p4
Aft Cap										باللا	0/09/2	4	9866
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					61264		3						

BE 10/08/3C

W/O:			We	RK ORDER CHANG	ES			
DATE	STEP	PRO	OCEDURE CHA	NGE	Ву	Date Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector
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Wednesday, August 25, 2010 2:31:44 PM

Work Order ID: 61456

Parent Item:

D206-642-441

Parent Item Name: Replacement Skidtube



Start Date: 8/27/2010

Required Date: 9/9/2010

Start Qty: 1.00

Required Qty: 1.00

CCR264SS3-3

Cherry Rivet

Purchased

No

170

Each

472.0000

Loc Code

D2649

Manufactured

No

ST311

Location Loc Oty 472 112314 113539 44 113973 424 170 Each

Loc Qty

29

29.0000

23

BE 10/07/08

Cross Bolt Spacer

D2680-041

Nut Plate

Manufactured

Location LG 58545 60652

2 27 170 Each Loc Code

No

Location Loc Qty ST021 35 55366 35 Loc Code

35.0000

W/O:			WC	ORK ORDER CHANG	ES				
DATE	STEP	PRO	OCEDURE CHA	NGE	Ву	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector
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Pieklist Print
Wednesday, August 25, 2010 2:31:45 PM

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Work Order ID: 61456							ARA PAIL
Parent Item: D206-642-441							
Parent Item Name: Replacement Skid	tube	1 1881318 13		ELI BLUIF GIBBI (INI IBBI	Start Date: 8	3/27/2010	Required Date: 9/9/2010
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AN960JD10L NAS1149D0332	J Purchased	No	Location PKG11 114723 ST282 110511 114407 ST381 114654	Loc Oty 3030 3030 153 10 143 39 39 39 230 Each	Loc Code 2,501.000 62		
Washer	, aronasco		Location ST348 110985	Loc Qty	Loc Code	y∫, 10 _x2_	109127' * PTO =>
AN960JD416 NAS1149D0463		No	110003	230 Each		1 x()4)	10/04/27
CR3212-4-03	Purchased	No		230 Each	1,912.000 2	2	
			Location ST311 111359 112314 114436 114450 114859	Loc Qty 1912 5 2 448 83 1374	Loc Code		BE 10/09/08

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Dart Aerospace Ltd WORK ORDER CHANGES Approval **Approval** N/O: Qtv Chief Eng / Date OC Inspector Bv Prod Mg PROCEDURE CHANGE **STEP** DATE 10/61/27 230 USE NASH49 CUSSER Oty C60) FOR WEARSHOES

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NUMBER 230 USE MS 270316 1-000 121/COD) FOR WEARSHOES

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NUMBER 230 USE MS 270316 1-000 121/COD) FOR WEARSHOES 10 /09/27 160 Valog/361 16.01.27 NCR: Yes No DQA: ____ Part No: D206-642-441 PAR#: Fault Category: Date: _____ Disposition: _____ QA: N/C Closed: _____ Date: ____ Resolution: WORK ORDER NON-CONFORMANCE (NCR) NCR: Approval **Approval** Section B Verification **Corrective Action** QC Inspector Chief Eng Sign & Section C **Action Description Description of NC** Initial Date STEP DATE Chief Eng Section A Chief Eng

Wednesday, August 25, 2010 2:31:45 PM

Work Order ID: 61456 Parent Item: D206-642-441 Parent Item Name: Replacement Skidtube Start Date: 8/27/2010 Required Date: 9/9/2010 Start Qty: 1.00 Required Qty: 1.00 D2651-1 Manufactured 230 734.0000 Each 22 10/09/27 Plug Location Loc Qty Loc Code FP 152 51530 152 fpa 582 (53349) 411 57869 171 D2651-3 Manufactured No 230 Each 342.0000 22 10/09/27 O-Ring Location Loc Qty Loc Code FΡ 342 342 D3535-15 Manufactured No 230 Each 20.0000 Wearshoe Location Loc Qty Loc Code FP18 20 7 61241 13 D3535-23 Manufactured No 230 Each .7.0000 Wearshoe Location Loc Qty Loc Code FP21 60864 7

B61830

W/O:		WORK ORDER CHANGES								
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Work Order ID: 61456 Parent Item: D206-642-441 Parent Item Name: Replacement Skidtube **Start Date: 8/27/2010** Required Date: 9/9/2010 Start Qty: 1.00 Required Qty: 1.00 D3535-37 Manufactured No 230 Each 17.0000 DS (20/01/ NK Wearshoe Location Loc Qty Loc Code FP 17 51654 4 56101 13 D3536-15 Manufactured 230 Each No 22.0000 Gasket Location Loc Qty Loc Code FP 16 56055 4 60875 12 FP11 6 59238 6 D3536-23 Manufactured No 230 Each 10.0000 Gasket Location Loc Oty Loc Code FP011 10 60234 10 D3536-37 Manufactured No 230 Each 15.0000 Gasket Location Loc Qty Loc Code FP 15 15 56102

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Wednesday, August 25, 2010 2:31:45 PM Work Order ID: 61456 Parent Item: D206-642-441 Parent Item Name: Replacement Skidtube Required Date: 9/9/2010 **Start Date: 8/27/2010** Start Qty: 1.00 Required Qty: 1.00 D3537-1 Manufactured 230 Each 32.0000 Wearpad Location Loc Qty Loc Code B60640 FP 55465 1 FP017 48 FP17 31 57713 3 60192 3 60491 25 D3537-3 Manufactured No 230 Each 10.0000 Wearpad Location Loc Qty Loc Code FP19 10 1360866 59711 10 MS27039-1-08 Purchased No 230 Each 1,685.000

Screw

Location	Loc Oty	Loc Code	
ST291	1685		
110835	493		X
114718	192		
115108	1000		

10/09/27

W/O:		WORK ORDER CHANGES								
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Wednesday, August 25, 2010 2:31:45 PM

Work Order ID: 61456

Parent Item:

D206-642-441

Parent Item Name: Replacement Skidtube



Start Date: 8/27/2010

Required Date: 9/9/2010

Start Qty: 1.00

Required Qty: 1.00

MS27039-4-06

Purchased

Screw

No

No

230

Each

118.0000



10/09/27

Location	. <u>La</u>	c Oty
ST292		118
<u>10906</u> 1		24
115460		94
	230	Each

Loc Code

Loc Code

802.0000

10/09/27

MS27039C1-08	Purchased

SCREW

Location	<u>l</u>	Loc Qty
FP		801
	115336	801
ST293		1
	19185	1

X60

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Page 7

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8 6 QTY QTY QTY QTY PART NUMBER DESCRIPTION X D2650-1 SKIDTUBE ASSEMBLY х D2650-3 SKIDTUBE ASSEMBLY х D2650-5 SKIDTUBE ASSEMBLY D D2650-7 SKIDTUBE ASSEMBLY D D2600-1-160 EXTRUSION D2654-1 WEB WEB D2654-3 D2654-5 1 WEB D2654-7 WEB D2646 AFT CAP D2647 CAP 17 18 19 23 D2649 CROSS BOLT SPACER 16 18 14 22 D2651-1 PLUG 16 18 14 22 D2651-3 O-RING 1 D2680-041 NUT PLATE С 2 D3286-1 DOUBLER 2 2 D3286-3 STUD 42 54 ALS7-1032-130 INSERT (or AKS4-1032-130, ALS4-1032-130, ALS7-1032-130) 2 2 2 2 AN960JD10L WASHER 2 2 2 2 CCR264SS3-3 RIVET 2 2 2 2 CR3212-4-03 RIVET 2 2 2 2 MS27039-1-08 SCREW 1 MS27039-4-06 SCREW AN960JD416 WASHER 52 52 CR3212-4-04 RIVET В F` NOTES: DRAWING UPDATED TO CURRENT STANDARDS, SHT 6 ADDED. ALL SECTION AND DETAIL VIEWS 2) FINISH: -CHEMICAL CONVERSION COAT PER DART QSI 005 4.1 TRANSFERED TO SHT 6, SHT 1 IN PL PART D2649 QTY A.IS 08 08 08 -POWDER COAT WHITE (4.3.5.1) PER DART QSI 005 4.3 UPDATED. SHT 6 SECT C-C GRIND INSTRUCTIONS -BLACK ANTI-SKID PAINT AS INDICATED TO 0.5 ABOVE LOCATION RIDGE PER DELETED FROM NOTE 7 (SEE NCR 239). DART QSI 005 4.4 RMOVE CBORE, CHG DRILL, ADD CHAMFER CP 06.03.30 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED REDRAW; INCORP. DE09136/9153/9163 CP 04.05.17 4) UNITS: INCHES UNLESS OTHERWISE NOTED MOD GROUND HANDLING ON D2650-1/-3 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX С CHANGE HOLE PATTERN AND FRONT END DS 97.10.29 6) IDENTIFICATION: NONE В AS MANUFACTURED CHANGES DS 97.06.26 7) WEIGHT: N/A A NEW ISSUE 97.03.25 DS 8) WELD PER DART QSI 004 REV. DESCRIPTION BY DATE 9) DAMAGE TOLERANCE ON FWD BEND: DESIGN DS DART AEROSPACE USA, INC. THERE SHOULD BE NO VISIBLE WRINKLES IN THE BEND FROM THE GROUND TO A HEIGHT OF 5 INCHES ABOVE THE GROUND. IT IS ACCEPTABLE TO POLISH OUT GOUGES UP TO 0.020 DEEP IN THE BENT PORTION OF THE TUBE. A DRAWN AJS PORT HADLOCK, WA MAXIMUM REDUCTION IN DIAMETER OF 0.150" IS ACCEPTABLE IN THE BENT PORTION OF THE TUBE. CHECKED DRAWING NO. REV. F 10) BOND WEB INTO OUTER TUBE WITH SIKAFLEX-241/-291 ADHESIVE PER DART QSI 015 MFG, APPR. D2650 SHEET 1 OF 6 11) INSERT D2651-1 PLUG C/W D2651-3 O-RING IN HOLES MARKED 'P' (BOTH SIDES OF TUBE) APPROVED TITLE SCALE 12) DRILL Ø0.297 FOR ALS7-1032-130 INSERTS USING TEMPLATE DT8056-1 ON -1 TUBE, DT8056-3 ON -3 TUBE, DT8056-5 ON -5 206/407 SKIDTUBE ASSEMBLIES TUBE, AND DT8056-7 ON -7 TUBE. INSTALL INSERTS AFTER FINISH. DE APPR. NTS

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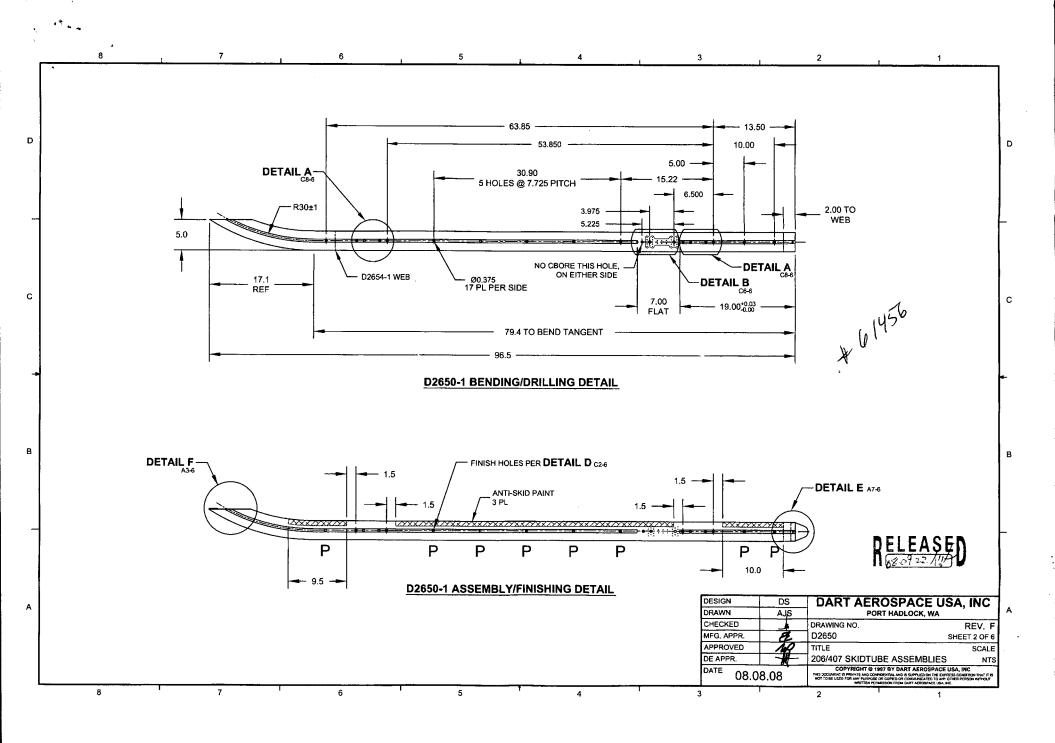
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13) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED

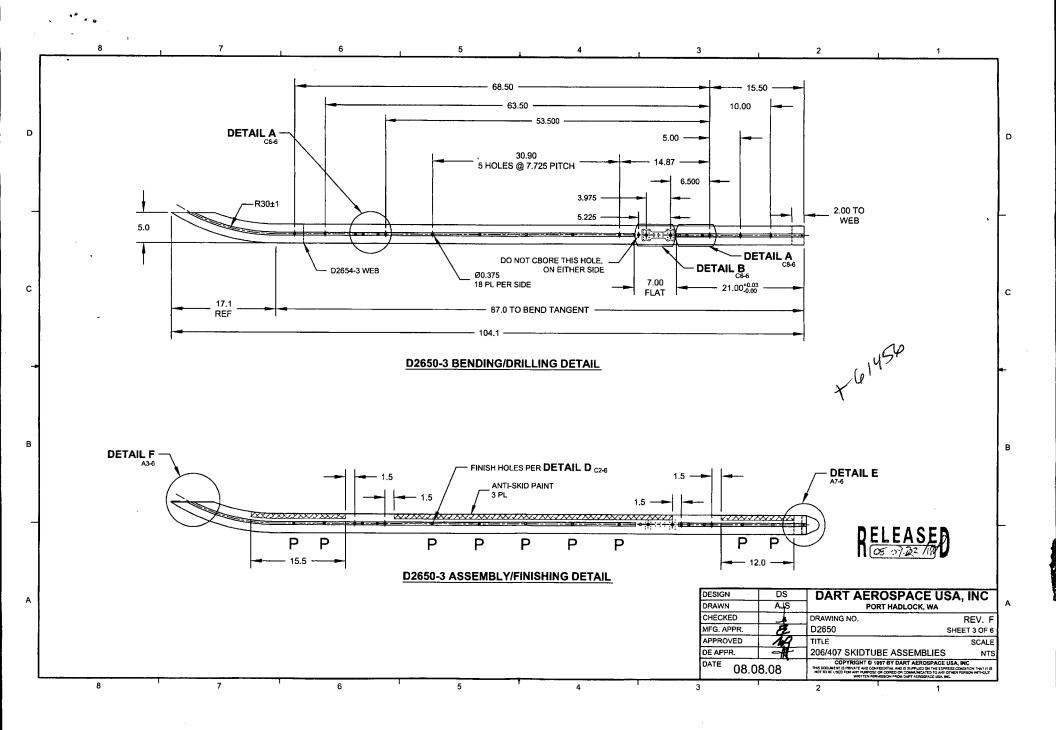
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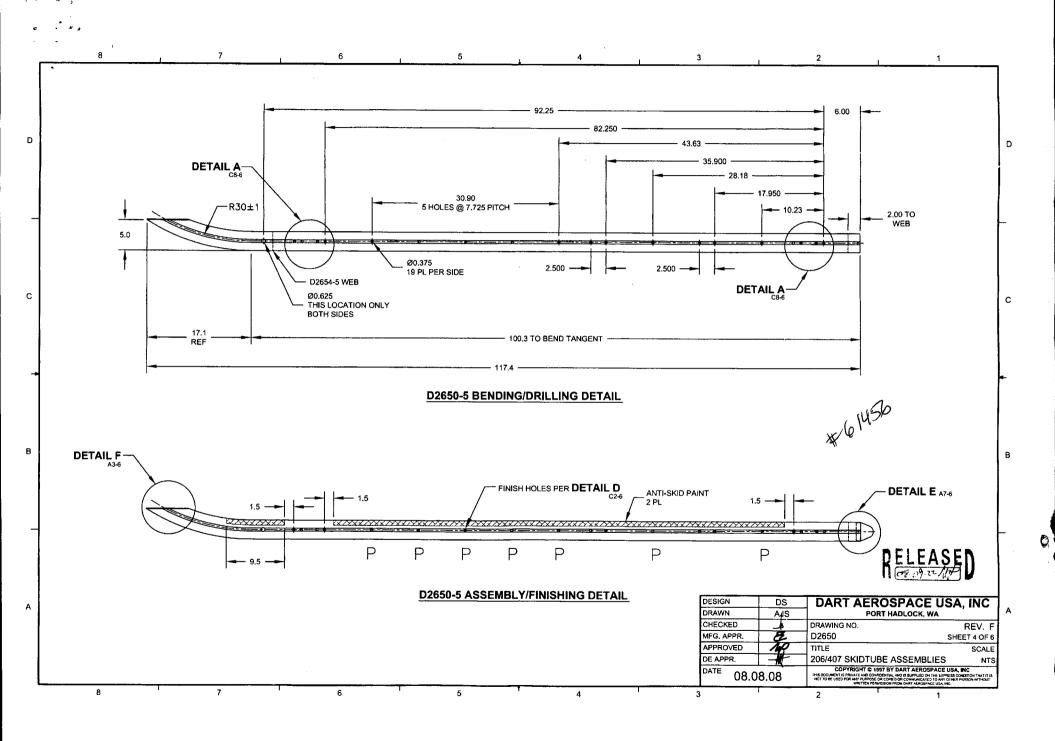
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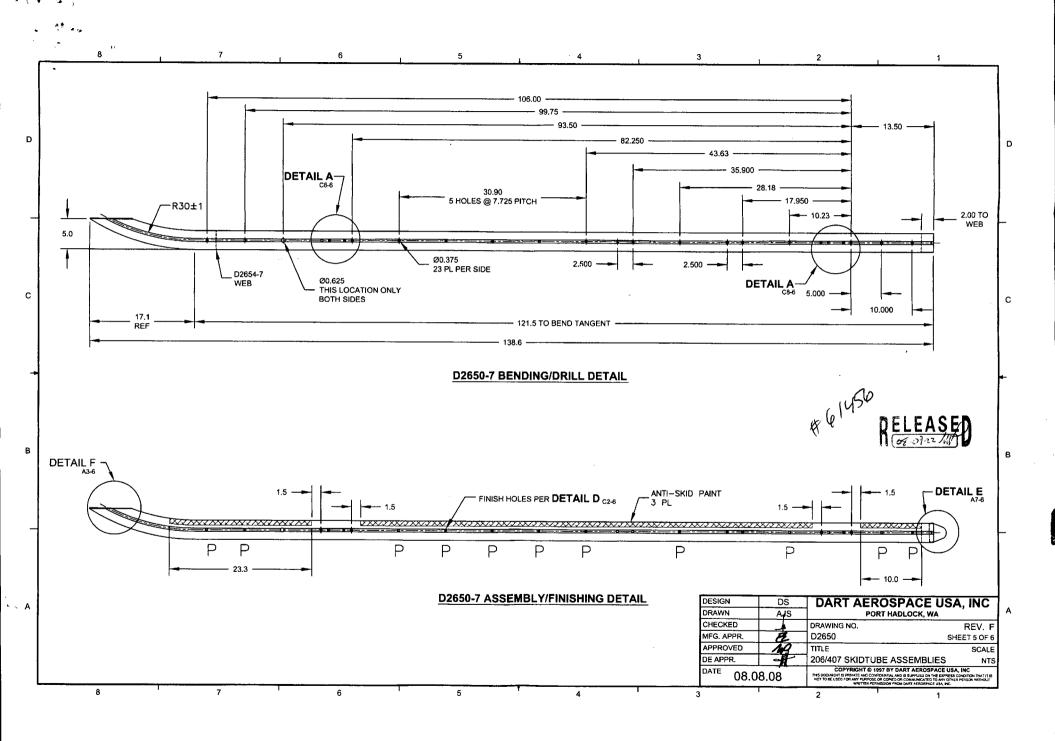
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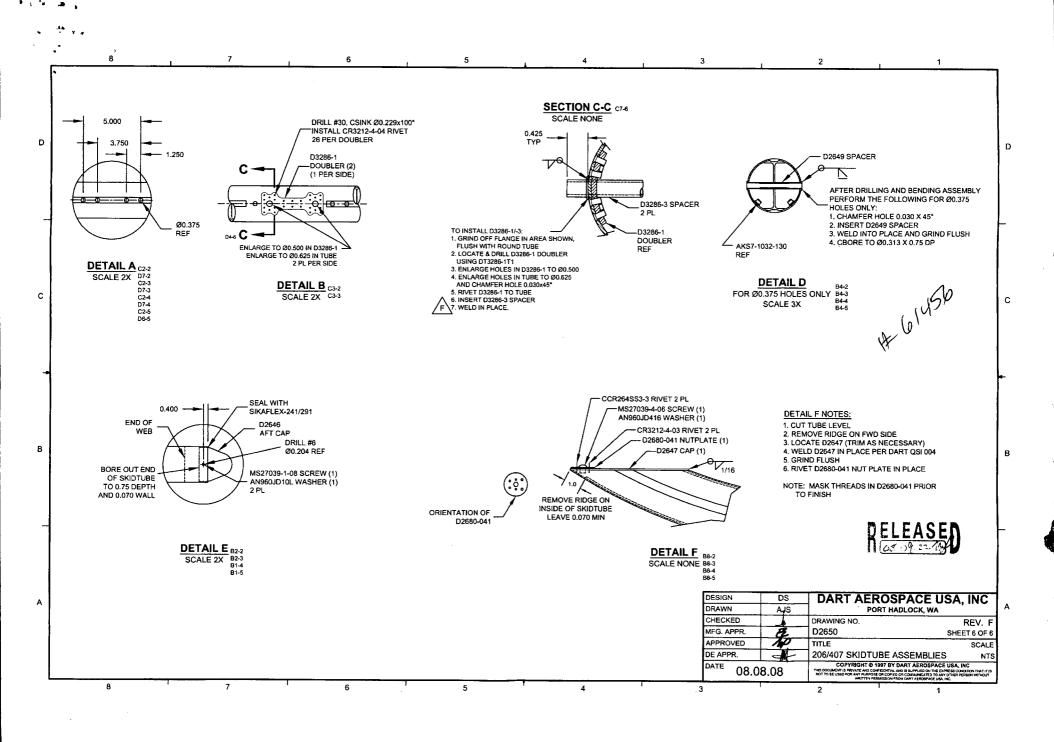
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NOTE: Date & initial all entries

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AWS D17.1.2001 QUALIFICATION TEST RECORD

Name: forclas Elliott	
Job number: 6039	_
Part number: D206 H12 + 441	_
Description: 200 Skid tube	_
Welding Process: Tig[/] Mig[]	
Base materiel: Aluminium	
Current: AC[] DC[]	

TEST REQUIREMENTS AND RESULTS

Visual: Penetration:	pass[] fail[] pass[] fail[]
<u>UNACCEPTABLE</u>	
Cracks: Undercut: Pin holes: Overlap (cold lap) Porosity (surface): Coloration:	pass[] fail[] pass[] fail[] pass[] fail[] pass[] fail[] pass[] fail[] pass[] fail[]
Qualifier Del Dal Welder Boxley Ellist	Date of Test Coupon 10.08.19

The above named individual is qualified in accordance with AWS D17.1.2001 to weld